

WHAT IS CLAIMED IS:

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1. A butterfly damper comprising:
an inner circumferential frame;
an outer circumferential frame; and
at least one arm member having one end connected to said outer
circumferential frame and an other end connected to said inner
circumferential frame,
wherein:
said at least one arm member has a racetrack-shaped cross
section.
 2. The butterfly damper as claimed in Claim 1, wherein:
each of said one end and said other end of said at least one arm
member has at least one curved surface.
 3. The butterfly damper as claimed in Claim 1, wherein:
a plurality of arm members are provided as said at least one arm
member.
 4. The butterfly damper as claimed in Claim 2, wherein:
a plurality of arm members are provided as said at least one arm
member.
 5. The butterfly damper as claimed in Claim 1, wherein:
said inner circumferential frame, said outer circumferential
frame and said at least one arm member are formed of resin integrally
with each other by an injection forming.
 6. The butterfly damper as claimed in Claim 2, wherein:
said inner circumferential frame, said outer circumferential
frame and said at least one arm member are formed of resin integrally

with each other by an injection forming.

7. The butterfly damper as claimed in Claim 3, wherein:

said inner circumferential frame, said outer circumferential frame and said at least one arm member are formed of resin integrally with each other by an injection forming.

8. The butterfly damper as claimed in Claim 4, wherein:

said inner circumferential frame, said outer circumferential frame and said at least one arm member are formed of resin integrally with each other by an injection forming.

9. The butterfly damper as claimed in Claim 1, wherein:

said outer circumferential frame has opposite end surfaces and an inner peripheral surface, said inner peripheral surface being connected to said opposite end surfaces to form opposite connecting edge portions; and

said one end of said at least one arm member is connected to a portion of said inner peripheral surface of said outer circumferential frame, said portion excluding said opposite connecting edge portions.

10. The butterfly damper as claimed in Claim 2, wherein:

said outer circumferential frame has opposite end surfaces and an inner peripheral surface, said inner peripheral surface being connected to said opposite end surfaces to form opposite connecting edge portions; and

said one end of said at least one arm member is connected to a portion of said inner peripheral surface of said outer circumferential frame, said portion excluding said opposite connecting edge portions.

11. The butterfly damper as claimed in Claim 3, wherein:

said outer circumferential frame has opposite end surfaces and an inner peripheral surface, said inner peripheral surface being connected to said opposite end surfaces to form opposite connecting edge portions; and

5 said one end of said at least one arm member is connected to a portion of said inner peripheral surface of said outer circumferential frame, said portion excluding said opposite connecting edge portions.

12. The butterfly damper as claimed in Claim 4, wherein:

10 said outer circumferential frame has opposite end surfaces and an inner peripheral surface, said inner peripheral surface being connected to said opposite end surfaces to form opposite connecting edge portions; and

15 said one end of said at least one arm member is connected to a portion of said inner peripheral surface of said outer circumferential frame, said portion excluding said opposite connecting edge portions.

13. The butterfly damper as claimed in Claim 5, wherein:

20 said outer circumferential frame has opposite end surfaces and an inner peripheral surface, said inner peripheral surface being connected to said opposite end surfaces to form opposite connecting edge portions; and

 said one end of said at least one arm member is connected to a portion of said inner peripheral surface of said outer circumferential frame, said portion excluding said opposite connecting edge portions.

14. The butterfly damper as claimed in Claim 6, wherein:

25 said outer circumferential frame has opposite end surfaces and an inner peripheral surface, said inner peripheral surface being connected to said opposite end surfaces to form opposite connecting

edge portions; and

said one end of said at least one arm member is connected to a portion of said inner peripheral surface of said outer circumferential frame, said portion excluding said opposite connecting edge portions.

5 15. The butterfly damper as claimed in Claim 7, wherein:

said outer circumferential frame has opposite end surfaces and an inner peripheral surface, said inner peripheral surface being connected to said opposite end surfaces to form opposite connecting edge portions; and

10 said one end of said at least one arm member is connected to a portion of said inner peripheral surface of said outer circumferential frame, said portion excluding said opposite connecting edge portions.

16. The butterfly damper as claimed in Claim 8, wherein:

15 said outer circumferential frame has opposite end surfaces and an inner peripheral surface, said inner peripheral surface being connected to said opposite end surfaces to form opposite connecting edge portions; and

20 said one end of said at least one arm member is connected to a portion of said inner peripheral surface of said outer circumferential frame, said portion excluding said opposite connecting edge portions.